

REMARKS/ARGUMENTS

The new claims are supported by those presented originally, and point out preferred embodiments of the invention such as the noted bimodal distribution, and preferred clay minerals muscovite and hectorite. As described in the on-line dictionary Ask.com, kaolinite and the kaolin group minerals differ chemically from muscovite and hectorite (emphasis in underlining and bold supplied):

Kaolinite

A common hydrous aluminum silicate mineral found in sediments, soils, hydrothermal deposits, and sedimentary rocks. It is a member of a group of clay minerals called the **kaolin group minerals**, which include dickite, halloysite, nacrite, ordered kaolinite, and disordered kaolinite. These minerals have a theoretical chemical composition of 39.8% alumina, 46.3% silica, and 13.9% water [ $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$ ], and they generally do not deviate from this ideal composition.

hectorite ('hek·tə'rīt)

(*mineralogy*) (**Mg,Li**)<sub>3</sub>Si<sub>4</sub>O<sub>10</sub>(OH)<sub>2</sub> A trioctohedral clay mineral of the montmorillonite group composed of a hydrous silicate of magnesium and lithium.

mus·co·vite  
*n.*

A potassium aluminum silicate mineral,  $\text{KAl}_2(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$ , the most common form of mica, which ranges from colorless or pale yellow to gray and brown, has a pearly luster, and is used as an insulator. Also called *white mica*.

Because neither Rowland nor Komforth discuss hectorite or muscovite, the new claims requiring these particular clay minerals are patentable over the disclosure in these references.

In addition, Rowland (the reference relied upon to teach the claimed clay mineral) does not disclose or suggest a clay mineral having a biomodal size distribution as required by new Claims 30 and 31. That is, the kaolin clay described in the Examples of Rowland do not

show a bimodal distribution but rather show, essentially, a unimodal distribution centered between 0.5 and 1 micron. Thus, Rowland alone, or in combination with Komforth, fails to disclose or suggest the formulation and tanning agent as described in new Claims 30 and 31.

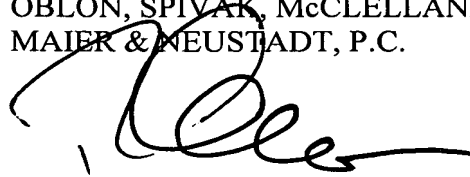
Finally, Rowland also fails to disclose the clay mineral element of Claims 14 and 20 where the number average particle diameter is less than 2 microns. As is clear from all of the Examples in Rowland, a significant portion of the reference particles fall between 5 and 1.7 microns. As nothing in either Rowland or Komforth disclose or suggest such a clay mineral, both the presently claimed formulation and tanning agent are patentable over these references.

With regard to the tanning methods described herein (Claims 25, 26, 32 and 33) Applicants respectfully submit that these claims are patentable in view of the prior art references because, even if Rowland did disclose the presently claimed clay mineral (which it does not) there is no reason that one of ordinary skill in this art would combine Rowland with Komforth. The reason is that, while Komforth is related to compositions for the preparation of leather, Rowland relates to the use of kaolin in the coating of paper to provide brightness, gloss, and opacity. See column 1, lines 9-21 of Rowland. While Komforth does suggest the use of kaolin as a suitable carrier (column 4, lines 20-22), these carriers are simply “further additives” that may or may not be added to the important retanning agents and fat liquoring agents that make up the subject of Komforth.

Accordingly, and in view of the above amendments and remarks, and the fact that neither applied reference discloses the clay mineral element herein, Applicants submit that the present application is in condition for allowance, and early notification to this effect is respectfully requested.

Respectfully submitted,

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